Subpart G—Requirements for Owners and Operators of Class V Injection Wells

SOURCE: 64 FR 68566, Dec. 7, 1999, unless otherwise noted.

§144.79 General.

This subpart tells you what requirements apply if you own or operate a Class V injection well. You may also be required to follow additional requirements listed in the rest of this part. Where they may apply, these other requirements are referenced rather than repeated. The requirements described in this subpart and elsewhere in this part are to protect underground sources of drinking water and are part of the Underground Injection Control (UIC) Program established under the Safe Drinking Water Act. This subpart is written in a special format to make it easier to understand the regulatory requirements. Like other EPA regulations, it establishes enforceable legal requirements.

DEFINITION OF CLASS V INJECTION WELLS

$\$\,144.80$ What is a Class V injection well?

As described in §144.6, injection wells are classified as follows:

- (a) Class I. (1) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to inject hazardous waste beneath the lowermost formation containing, within one-quarter mile of the well bore, an underground source of drinking water.
- (2) Other industrial and municipal disposal wells which inject fluids beneath the lowermost formation containing, within one quarter mile of the well bore, an underground source of drinking water;
- (3) Radioactive waste disposal wells which inject fluids below the lower-most formation containing an underground source of drinking water within one quarter mile of the well bore.
- (b) Class II. Wells which inject fluids:
 (1) Which are brought to the surface in connection with natural gas storage operations, or conventional oil or natural gas production and may be com-

mingled with waste waters from gas plants which are an integral part of production operations, unless those waters are classified as a hazardous waste at the time of injection.

- (2) For enhanced recovery of oil or natural gas; and
- (3) For storage of hydrocarbons which are liquid at standard temperature and pressure.
- (c) Class III. Wells which inject fluids for extraction of minerals including:
- (1) Mining of sulfur by the Frasch process:
- (2) In situ production of uranium or other metals; this category includes only in situ production from ore bodies which have not been conventionally mined. Solution mining of conventional mines such as stopes leaching is included in Class V.
- (3) Solution mining of salts or potash.
- (d) Class IV. (1) Wells used by generators of hazardous waste or of radioactive waste, by owners and operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste into a formation which within one quarter (1/4) mile of the well contains an underground source of drinking water.
- (2) Wells used by generators of hazardous waste or of radioactive waste, by owners and operators of hazardous waste management facilities, or by owners or operators of radioactive waste disposal sites to dispose of hazardous waste or radioactive waste above a formation which within one quarter (1/4) mile of the well contains an underground source of drinking water
- (3) Wells used by generators of hazardous waste or owners or operators of hazardous waste management facilities to dispose of hazardous waste, which cannot be classified under paragraph (a)(1) or (d)(1) and (2) of this section (e.g., wells used to dispose of hazardous waste into or above a formation which contains an aquifer which has been exempted pursuant to 40 CFR 146.04).
- (e) Class V. Injection wells not included in Class I, II, III, IV or VI. Typically, Class V wells are shallow wells

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used to place a variety of fluids directly below the land surface. However, if the fluids you place in the ground qualify as a hazardous waste under the Resource Conservation and Recovery Act (RCRA), your well is either a Class I or Class IV well, not a Class V well. Examples of Class V wells are described in §144.81.

(f) Class VI. Wells used for geologic sequestration of carbon dioxide beneath the lowermost formation containing a USDW, except those wells that are experimental in nature; or, wells used for geologic sequestration of carbon dioxide that have been granted a waiver of the injection depth requirements pursuant to requirements at §146.95 of this chapter; or, wells used for geologic sequestration of carbon dioxide that have received an expansion to the areal extent of a existing Class II enhanced oil recovery or enhanced gas recovery aquifer exemption pursuant to §146.4 of this chapter and §144.7(d).

[64 FR 68566, Dec. 7, 1999, as amended at 75 FR 77290, Dec. 10, 2010]

§144.81 Does this subpart apply to me?

This subpart applies to you if you own or operate a Class V well, for example:

- (I) Air conditioning return flow wells used to return to the supply aquifer the water used for heating or cooling in a heat pump;
- (2) Large capacity cesspools including multiple dwelling, community or regional cesspools, or other devices that receive sanitary wastes, containing human excreta, which have an open bottom and sometimes perforated sides. The UIC requirements do not apply to single family residential cesspools nor to non-residential cesspools which receive solely sanitary waste and have the capacity to serve fewer than 20 persons a day.
- (3) Cooling water return flow wells used to inject water previously used for cooling:
- (4) Drainage wells used to drain surface fluids, primarily storm runoff, into a subsurface formation;
- (5) Dry wells used for the injection of wastes into a subsurface formation;
- (6) Recharge wells used to replenish the water in an aquifer;

- (7) Salt water intrusion barrier wells used to inject water into a fresh aquifer to prevent the intrusion of salt water into the fresh water;
- (8) Sand backfill and other backfill wells used to inject a mixture of water and sand, mill tailings or other solids into mined out portions of subsurface mines whether what is injected is a radioactive waste or not.
- (9) Septic system wells used to inject the waste or effluent from a multiple dwelling, business establishment, community or regional business establishment septic tank. The UIC requirements do not apply to single family residential septic system wells, nor to non-residential septic system wells which are used solely for the disposal of sanitary waste and have the capacity to serve fewer than 20 persons a day.
- (10) Subsidence control wells (not used for the purpose of oil or natural gas production) used to inject fluids into a non-oil or gas producing zone to reduce or eliminate subsidence associated with the overdraft of fresh water;
- (11) Injection wells associated with the recovery of geothermal energy for heating, aquaculture and production of electric power;
- (12) Wells used for solution mining of conventional mines such as stopes leaching;
- (13) Wells used to inject spent brine into the same formation from which it was withdrawn after extraction of halogens or their salts:
- (14) Injection wells used in experimental technologies.
- (15) Injection wells used for in situ recovery of lignite, coal, tar sands, and oil shale.
- wells that receive or have received fluids from vehicular repair or maintenance activities, such as an auto body repair shop, automotive repair shop, new and used car dealership, specialty repair shop (e.g., transmission and muffler repair shop), or any facility that does any vehicular repair work. Fluids disposed in these wells may contain organic and inorganic chemicals in concentrations that exceed the maximum contaminant levels (MCLs) established by the primary drinking water regulations (see 40 CFR part 141).